



Collaborative Information Portal

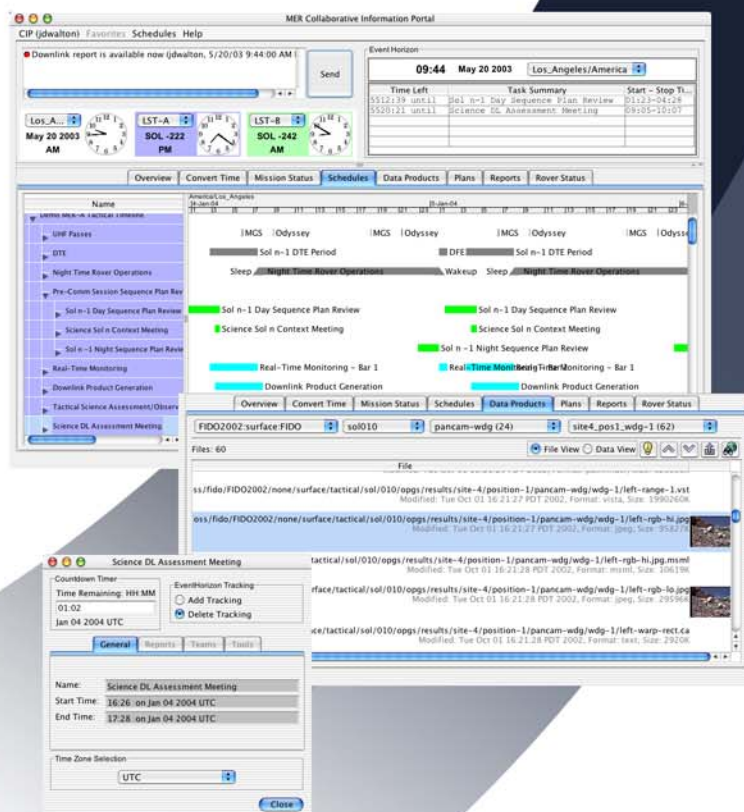
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To keep the Mars Exploration Rover (MER) Mission staff informed during operations, researchers developed the Collaborative Information Portal (CIP) specifically to support the teams in mission data retrieval, analysis and understanding for performing time-critical tasks.

The Mars Exploration Rover (MER) Mission has been called the most complex ground operations scenario of any NASA planetary mission, involving 240 scientists and engineers operating twin rovers on opposite sides of the planet.

Throughout the MER mission, scientists and engineers collaborated daily to analyze existing and incoming data. The staff selected science targets and rover paths for reaching the targets, and developed sequences to command the rovers across the rocky Martian terrain. A day in the mission was tightly scheduled, involving numerous data analysis and planning meetings. Meanwhile, MER Mission teams worked on Mars time, a 24-hour, 39-minute day, while operating rovers on opposite sides of Mars.

With CIP the teams could find out at a glance the time anywhere on Mars or on Earth and could see what events were scheduled to occur. When a rover returned images and other data to Earth, the CIP server automatically cataloged and organized the data for the user. The Web-based CIP would quickly and automatically inform the mission teams of changes to mission status and made it easier for the teams to collaborate.



MERCIP

MER Collaborative Information Portal

Features

- Three-tier Java-based architecture supporting multiple client systems
- Unique metadata repository for data integration and query
- Secure communications between middleware and clients via Web services
- Automatic notification to user of new data and reports
- Enables real-time collaboration among team members



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